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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,032	04/27/2001	Atsushi Tanaka	43890-510	7215

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WASHINGTON, DC 20005-3096

EXAMINER

FERGUSON, KEITH

ART UNIT	PAPER NUMBER
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2683

8

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/843,032

Applicant(s)

TANAKA ET AL.

Examiner

Keith T. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 13-19 is/are rejected.
- 7) ☒ Claim(s) 5, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8</u> . | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "**means**" and "**said**," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 6, 16 and 17 recites wherein said input and output means is a universal serial communication interface. There is insufficient antecedent basis for this limitation in the claim.

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*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,6-9 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by DeSchrive.

The claimed invention reads on DeSchrive as follow:

Regarding claims 1 and 13, DeSchrive discloses a wireless display system (fig.1) composed of an image display device (wireless communication device) (fig. 1 number 14) and a data processing device (pen) (fig. 1 number 12) connected through wireless communication means (col. 4 lines 4-6), said wireless display system (fig.1) comprising: data input (fig. 1 number 20) and output means (fig. 1 number 26) for input and output of data in and from said image display device (col. 5 lines 55-58), input and output data converting means for converting data format (GSM) and protocol (IP) in said wireless communication means (col. 4 lines 34-67), and input and output processing (col. 5 lines 55-

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59) virtual means for making virtual data input and output process in said data processing device as if the data input and output means were connected directly (col. 5 lines 55-59), wherein said data input and output means and input and output data converting means are provided in said image display device (col. 5 lines 55-59), said input and output processing virtual means is provided at said data processing device side (col. 5 lines 55-59), and all data about data input and output communicated between said image display device and data processing device are mutually transmitted and received through said input and output data converting means and input and output processing virtual means (col. 5 lines 55-59). DeSchrive further disclose display means for displaying the image (fig. 1 number 26) and operating means (pen) to be operated by a user (fig. 1 number 12).

Regarding claims 6 and 7, DeSchrive discloses said input and output means is a serial communication interface (sensor, inherently, as a scanner to move a finely focused beam of light or electrons in a systematic pattern over a surface in order to reproduce or sense and subsequently transmit an image, as taught in col. 3 line 64 through col. 4 line 6).

Regarding claim 8, DeSchrive discloses a method of communication of wireless display system having said image display device and data processing device (col. 1 lines 55-62)

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comprising the steps of: (a) entering and producing data in and from said image display device, (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59) (b) converting data format and protocol in the wireless communication (col. 4 lines 34-67), and (c) processing input and output in said data processing device virtually as if data input and output processing were done directly (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), wherein step (a) and step (b) are done at the image display device side (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), step (c) is done at the data processing device side (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), and all communication data between said image display device and data processing device is processed at step (b) and step (c) (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), and is mutually transmitted and received (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59).

Regarding claim 9, DeSchraver discloses a computer program recording medium for executing communications of wireless display system having said image display device and data processing device (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59) comprising the programs for: (a) entering and producing data in and from said image display device (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), (b) converting data format and protocol in the wireless communication (col. 4 lines 34-67), and (c) processing input and output in said data processing device virtually as if data input and output processing were done directly (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), wherein program (a) and program (b) are executed at the image display device side (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), and program (c) is executed at the data processing device side (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59), and all communication data between said image display device and data processing device is transmitted and received by execution of program (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59) (b) and program (c) (col. 3 line 64 through col. 4 line 6 and col. 5 lines 55-59).

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*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2,4,14,16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeSchrive in view of Son et al..

Regarding claims 2 and 4, DeSchrive discloses a wireless Display System as discussed supra in claim 1 above. DeSchrive differs from claim 2 of the present invention in that it does not explicitly disclose a power saving control means, and said power saving control means sets the image display device in first power saving mode when the image display device is not operated for a specific time, and said power saving control means sets said display means and operating means in power saving state in the first power saving mode. Son et al. teaches a wireless display device comprising a power saving control means (col. 4 lines 32-67), and said power saving control means sets the image display device in first power saving mode when the image display device is not operated for a specific time (col. 4 lines 32-67),

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and said power saving control means sets said display means (display) and operating means (keypad) in power saving state in the first power saving mode (col. 4 lines 32-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DeSchrive wireless communication device with a power saving control means, and said power saving control means sets the image display device in first power saving mode when the image display device is not operated for a specific time in order for the wireless communication device within the wireless system to go to sleep when there is no pen input, which saves the wireless communication device battery when communicating with the pen, as taught by Son et al..

Regarding claim 14, DeSchrive discloses the data from said data input and output means is used for connection verification in wireless connection between the data processing device and image display device (col. 5 lines 55-59).

Regarding claims 16 and 18, DeSchrive discloses said input and output means is a serial communication interface (sensor, inherently, as a scanner to move a finely focused beam of light or electrons in a systematic pattern over a surface in order to reproduce or sense and subsequently transmit an image, as taught in col. 3 line 64 through col. 4 line 6).

7. Claims 3,10,15,17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeSchrive in view of Son et



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al. as applied to claims 1 and 2 above and in further view of Adachi et al..

Regarding claims 3 and 10 the combination of DeSchrive and Son et al. differs from claims 3 and 10 of the present invention in that they do not explicitly disclose said power saving control means sets the image display device in second power saving mode for saving more power than in first power saving mode when the image display device in first power saving mode, and the data input and output is not used for a specific time. Adachi et al. teaches a power saving termination key (fig. 1 number 44 and its description) which sets the image display device in second power saving mode (off mode) for saving more power than in first power saving mode when the image display device in first power saving mode (fig. 1 number 44 and its description). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of DeSchrive and Son et al. with said power saving control means sets the image display device in second power saving mode for saving more power than in first power saving mode when the image display device in first power saving mode, and the data input and output is not used for a specific time in order to for the wireless communication device within the wireless system to be turned off to save power when no data input is entered through the pen, as taught by Adachi et al..

Regarding claim 15, DeSchrive discloses the data from said data input and output means is used for connection verification in wireless connection between the data processing device and image display device (col. 5 lines 55-59).

Regarding claims 17 and 19, DeSchrive discloses said input and output means is a serial communication interface (sensor, inherently, as a scanner to move a finely focused beam of light or electrons in a systematic pattern over a surface in order to reproduce or sense and subsequently transmit an image, as taught in col. 3 line 64 through col. 4 line 6).

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***Allowable Subject Matter***

8. Claims 5,11 and 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 5,11 and 12, the prior art of record fails to teach or suggest, alone or in combination wherein said wireless communication means comprises means for measuring the communication rate of all data including the image data transmitted from the data processing device and displayed in the image display device, and the communication rate of the wireless communication is controlled by decimating the updating of the image data at specific intervals when the communication rate exceeds a certain rate of the effective communication rate of the wireless communication.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Philyaw (U.S. Patent 6,694,356) discloses a scanner (fig. 39 number 3703) for sending a wireless image to a wireless display (personal computer) (fig. 39).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be

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reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson  
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April 15, 2004

